

Digital Jewelry

¹Kavita S, ²Kavana M, ³Harshita M, ⁴Divya B.M

¹UG Scholar , Dept. of ISE, BGSIT,BG Nagar-571448, Mandya, Karnataka, India

² UG Scholar , Dept. of ISE, BGSIT,BG Nagar-571448, Mandya, Karnataka, India

³ UG Scholar , Dept. of ISE, BGSIT,BG Nagar-571448, Mandya, Karnataka, India

⁴Prof , Dept. of ISE, BGSIT,BG Nagar-571448, Mandya, Karnataka, India

Abstract: *Digital jewellery is the fashion jewellery with embedded intelligence. All are getting attracted towards these digitally invented jewellerys. These are also used to secure our documents or our personal information to store. We can use these to store our personal securable passwords and other pin numbers such as locker pins or any such securable data. They have the potential to be all in on replacement for your driver's license, key chain, business cards, credit cards, health insurance card etc. The next trending technology would be "Digital Jewellery". This has become the craziest part in youths. All are tending towards this technology. Today's manufacturers place millions of transistors on a microchip, which can be used to make small devices that store tons of digital data. The whole concept behind this is to be able to communicate to other by means of wireless appliances. The latest computer craze has been to be able to wear wireless computers. Digital jewellery can be a next sizzling fashion trend of the technological wave. The combination of microcomputer devices and increasing computer power has allowed several companies to begin producing the fashion jewellery. Digital jewellery can be defined as wireless computers. These are also used in emails, voicemails, etc.*

Keyword: *Ruby neck less, java ring, eyepiece, etc*

I. INTRODUCTION

In our present lifestyle, we would like to use new devices or newly invented technical based products or technically applicable devices. We personally technical students would like to use trending software devices. It has become a craze for us. The combination of shrinking computer devices and increasing computer power has allowed several companies to begin producing jewelry. Girls mainly love jewelrys a lot; sometimes even guys like to use it. Why not we start modeling the jewelrys in a

trendy way so that all youths get attracted to those and come forward to purchase them. The demand for these would gradually increase and people will obviously start using them. May be not today, may be not tomorrow but it will definitely come. The latest computer craze has been increased to wear wireless computers. The whole concept behind this is to be able to communicate to others by means of wireless appliances. The other key factor of this concept market is to stay fashionable at the same time.

1. By the end of the decade we all would be wearing instead of sitting in front of them:

The mobile computing is starting to divide the chains that tie the people to their desks and now a day's many mobile machines are still a bit clumsy to carry around. In the coming generation of computing there will be a sudden release of computer components across our bodies rather than on our desks, generally, the jewellery decorates the body and the digital jewellery have tiny particles requirements and at the present, the researchers are looking to transform the way people think about the beads and bobbles that the people wear.

Digital jewelry is fashion jewelry with embedded intelligence. It can help you solve problems like forgotten passwords and security badges. It will be the evolution in digital technology that makes computer elements entirely compatible with the human form. They have the potential to be all in one replacement for your driver license, key chain, business cards, credit cards, health insurance cards, corporate security badge and loose cash.

II. COMPONENTS OF DIGITAL JEWELRY:

According to Sayeesa (2013), the concept of digital jewellery is to piece the various components inside a cell phone and repackage them to make a digital jewellery where user can wear it. The various components inside a cell phone such as Microphone, Receiver, Touch Pad, Display, Circuit Board, Antenna, and Battery etc.



Fig 1: Digital Jewellery

The components are:

1. Earrings - Speakers embedded into these earrings will be the phone's receiver. The digital jewellery companies are developing things like Bluetooth devices in the form of pendants or earrings that people can wear that help enhance their devices.
2. Necklace - Users will talk into the necklace's embedded microphone with the help of the embedded voice recognition software.
3. Ring - This is equipped with light-emitting diodes (LEDs) that flash to indicate an incoming call. It can also be programmed to flash different colours to identify a particular caller or indicate the importance of a call.

ELECTROMAGNETIC-BEADS:

The closest comparison to this model is that of 'beads' which are strung together to make a custom necklace or bracelet, with interchangeable electromagnetic component systems or devices. One bead may be a capacitor on the inside, and a solar panel on the outside (1), another bead may have an internal resistor (2), which feed power into a programmed microcontroller bead which drives an external screen (3), with other options available in a variety of bead configurations which compose a circuit, including beads with a piezo element (4), voltage regulator, crystal, or rechargeable battery (5) as part of the modular jewel circuit. The number of data pins on the microcontroller needs to be enough to easily program the display layer plus the switches without overly complex and advanced coding methods.

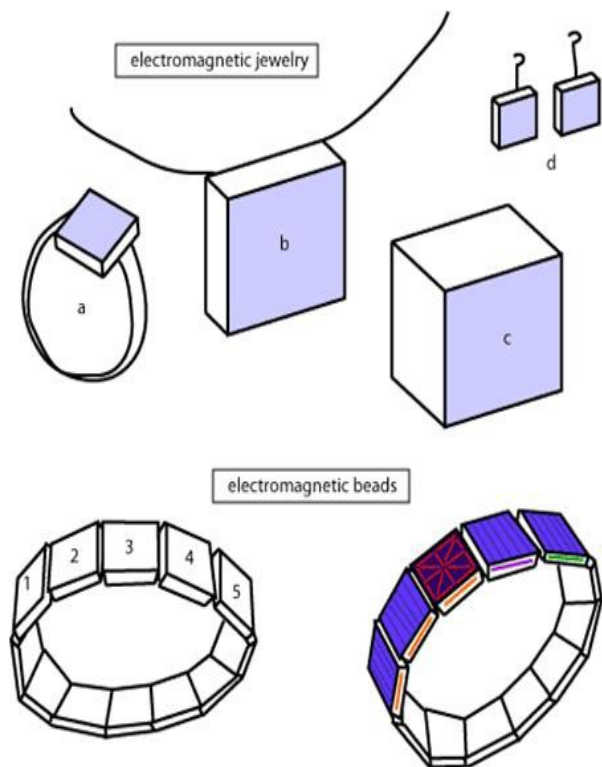


Fig 2: The key to the device's ability to work effectively is a balancing of electronic components within the circuit with a light-duty processing and limited power consumption required for the display layer.

RED RUBY NECKLACE

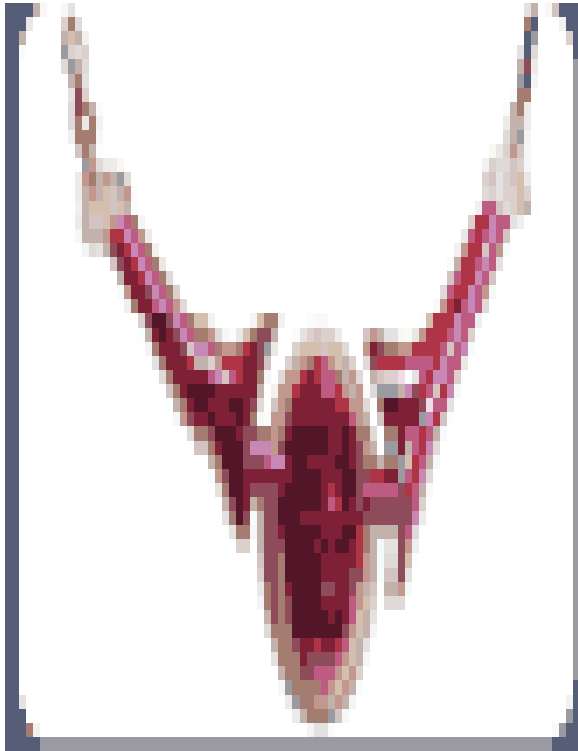


Fig 3: Ruby necklace.

The microphone is built in necklace. And there will be a button back side of the necklace, if its pressed the message automatically gets recorded. In this necklace the communication is made easier. We get these smart necklace in the form of lockets as well. The digital lockets that keeps precious photos close at hand. It can be used to connect people from far region as well, just as our smart phones. The jewellery can be made in different sizes, shapes, designs. It also depends on our needs we want. The electromagnetic properties and electronic chips are used to display the information on the screen. We can even display Roman alphabets on the necklaces, in 4D space using leather cards. Then you can proceed to record your message. In addition to changing the way we make phone calls, digital jewellery will also affect how we deal with the ever-increasing bombardment of email. Imagine that the same ring that flashes for phone calls could also inform you that e-mail is piling up in your inbox. This flashing alert

could also indicate the urgency of the e-mail. Two of the most identifiable components of a personal computer are the mouse and monitor. These devices are as familiar to us today as a television set.



FIG 4: The eyepiece above displays images and data received wirelessly from the Communicator's belt module. The mouse-ring that IBM is developing will use the company's

Track point technology to wirelessly move the cursor on a computer-monitor display. You're probably most familiar with Track Point as the little button embedded in the keyboard of some laptops. IBM Researchers have transferred Track Point technology to a ring, which looks something like a black-pearl ring. On top of the ring is a little black ball that users will swivel to move the cursor, in the same way that the Track Point button on a laptop is used. This Track Point ring will be very valuable when monitors shrink to the size of watch face. In the coming age of ubiquitous computing, displays will no longer be tied to desktops or wall screens. Instead, you'll wear the display like a pair of sunglasses or a bracelet. Researchers are overcoming several obstacles facing these new wearable displays, the most important of

which is the readability of information displayed on these tiny devices.



Fig 5 The Java Ring can be programmed to give you access to every door and device.

The java ring was introduced at Java One Conference, and it has been tested at Celebration School, an innovative K-12 school just outside Orlando, FL. In the summer of 1989, Dallas Semiconductor Corp, produced the first stainless-steel- encapsulated memory devices utilizing the Dallas Semiconductor 1-wire bus. It is a finger ring the rings given to students are programmed with java alphabets that communicate with host applications on networks systems. The microchips are placed in a ring. The Java Ring is a stainless- steel ring, 16-millimeters (0.6 inches) in diameter, which houses a 1-million-transistor processor, called an I Button.

The ring has 134 KB of RAM, 32 KB of ROM, a real-time clock and a Java virtual machine, which is a piece of software that recognizes the Java language and translates it for the user's computer system. In the next age of computing, we will see an explosion of computer parts across our bodies, rather than across our desktops. Digital jewellery, designed to supplement the personal computer, will be the evolution in digital technology that makes computer elements entirely compatible with the human form.

III. CONCLUSION:

I would like to conclude that, as we have spoken many things about this digitalizing the world with lot many digital jewelleryes. We would really make sure that the world would get attracted towards these digital jewelleryes and would start using them. They will surely like them to use, as they are very user friendly and they make our work get easier without sitting in front of PC. We can easily wear them and get our work done. We can easily carry them along with us.

REFERENCES

- [1] www.howstuffworks.com
- [2] www.IBM.com
- [3] www.infoworld.com
- [4] www.ibutton.com
- [5] Article by Jacob Nielsen.
- [6] Cameron S. Miner, "IBM Almaden Research Center, San Jose, CA.
- [7] Christopher Campbell.